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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/127,112	07/31/1998	BRIAN I MARCUS	005	9729

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EXAMINER

ROVNAK, JOHN EDMUND

ART UNIT	PAPER NUMBER
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3714

DATE MAILED: 10/10/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/127,112

Applicant(s)

MARCUS ET AL. *Ch*

Examiner

John Rovnak

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 August 2002.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 49-90 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 49-90 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 August 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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1. Applicant's arguments with respect to claims 49-69 have been considered but are moot in view of the new ground(s) of rejection.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 49-56, 60-68, 70-83, are rejected under 35 U.S.C. 103(a) as being unpatentable over Fitzmaurice et al in view of Ohara et al.

4. Fitzmaurice et al discloses a computer system comprising : a plurality of graspable objects (Figs. 4-6) having a unique visual aspect (discussion on page 6, col. 2 wherein the author anticipates variation of the attributes of a brick (shape, size, color, weight); a surface including at least a support structure capable of supporting said plurality of graspable objects, said section having no predefined positions for supporting said plurality of graspable objects (Figs. 1-6 and 8); a graphical environment presenting a visual event prompting the user to cognitively react by selecting and manipulating said one or more graspable objects in response to said event (Basic Concepts-page 2, Fig. 6, discussion of digital desk, col. 2 of page 3); a detecting element proximate to at least said section of said surface (Basic Concepts); a personal computer (Computer described in Basic Concepts; Stage 3: Prototype-page 5, "SGI Indigo2, wherein a loading device, storage device, and processor are inherent); a component within said one or more graspable objects capable of affecting an electrical change in at least a portion of said detecting element (pages 6-7, "Bricks internal ability" and

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"Communication"); said processor being capable of identifying at least a position of said one or more graspable objects on said surface.

5. Applicant has amended the claim to limit the invention's use to children.

However, Fitzmaurice et al does not suggest that the disclosed computer system is not usable by children. Furthermore, it would have been obvious in view of Ohara et al that a computer system comprising graspable user interfaces, such as 112, 108 and 103, is usable by children.

6. Fitzmaurice et al indicates the use of a grid board for communication between graspable objects and a computer. Ohara et al further teaches the use of a wire grid and electrically conductive wires for graspable object detection (Fig. 2 and col. 5).

7. The additional limitation of at least one graspable object having a component exhibiting a characteristic of a unique visual aspect is addressed on page 6, paragraph 2, where the variation of the attributes of a brick to indicate its function is discussed.

8. Fitzmaurice et al anticipates the indication of shape, size, color and weight. It would have been obvious to one of ordinary skill in the art that since the graspable objects of Fitzmaurice et al are directed to particular uses, they would comprise some means of conventional identification such as a symbol, alphanumeric characters or a picture.

9. Although Fitzmaurice et al does not discuss internal processing methods, it would have been obvious in view of conventional practice that more than one processor could be used for specific tasks.

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10. Fitzmaurice et al anticipates the use of wireless communication links (page 7 "communication").

11. Audio is anticipated in Table 1 (output).

12. Claims 57 and 69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fitzmaurice et al in view of Ohara et al and further in view of Tooley, made of record in the previous office action.

13. See the above rejection over Fitzmaurice et al in view of Ohara et al.

Fitzmaurice et al discusses the tracking of graspable objects but does not discuss the use of triangulation. However, Tooley teaches the detection of objects on a surface utilizing triangulation detection means (Fig. 2). It would have been obvious to one of ordinary skill in the art to utilize the tracking method of Tooley for the Fitzmaurice et al graspable object tracking.

14. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

15. Claims 58-59 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The first and second processors lack antecedent basis with amended claim 49.

16. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

17. Claims 72-73, 75-83 are rejected under 35 U.S.C. 102(e) as being anticipated by Ohara et al.

18. Ohara et al discloses a computer system comprising: a plurality of graspable objects (108, 112, 103), one or more graspable objects having a unique visual aspect; a support structure including at least a section capable of supporting said plurality of graspable objects; a graphical environment for a child, the graphical environment presenting a child with a visual event prompting the child to cognitively react by selecting and manipulating said one or more graspable objects in response to said event; a detecting element (Figs. 2 and 3) proximate to at least said section of said support structure; a processor capable of identifying a position of a graspable object on said surface, wherein said graphical environment comprises a visual image on said section of said support structure. Also see Fig. 1.

19. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

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20. Claims 84-92 rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification, page 11 discusses the identification of different characters on the blocks by the identification of the weight of the block. The specification does not discuss the detecting of a mechanical downward *force generated by the child's placement or manipulation* of the one or more graspable objects on the work space.


21. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Rovnak whose telephone number is (703) 308-3087. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Hughes can be reached on (703) 308-1806. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9302 for regular communications and 703-872-9303 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1148.


John Rovnak
Primary Examiner
Art Unit 3714

October 8, 2002